

Lesson Plan

Subject: **MFT** (Th -2)

Name of faculty: SATYABRATA MOHARANA

Semester: 4TH

Class allotted: 4p/week

Branch: Mechanical

Session: 2024(S)

Discipline	Semester	From date:	To date:	Teaching Aid
Subject:	No. of days/ per week	Theory/ Practical –Topics/Lesson		
Week	Date/Period			
1	16/01/2024	Cutting Tools Cutting action of various and tools such as Chisel, hacksaw blade, dies and reamer Turning tool geometry and purpose of tool angle Machining process parameters (Speed, feed and depth of cut)		White Board Marker Smart board
	TO 20/01/2024			
2	22/01/2024	Coolants and lubricants in machining and purpose Construction and working of lathe and CNC lathe Major components of a lathe and their function Operations carried out in a lathe(Turning, thread cutting, taper turning, internal machining, parting off, facing, knurling)		White Board Marker Smart board
	TO 27/01/2024			
3	29/02/2024	Safety measures during machining Capstan lathe Difference with respect to engine lathe Major components and their function		White Board Marker Smart board
	TO 03/02/2024			
4	05/02/2024	Define multiple tool holders Turret Lathe Difference with respect to capstan lath Major components and their function		White Board Marker Smart board
	TO 10/02/2024			


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Week	Date/Period	Theory/ Practical –Topics/Lesson	Teaching Aid
5	12/02/2024 TO 17/02/2024	Draw the tooling layout for preparation of a hexagonal bolt & bush Shaper. Potential application areas of a shaper machine Major components and their function	White Board Marker Smart board
6	19/02/2024 TO 24/02/2024	Explain the automatic table feed mechanism Explain the construction & working of tool head Explain the quick return mechanism through sketch State the specification of a shaping machine.	White Board Marker Smart board
7	26/02/2024 TO 02/03/2024	Planing Machine Application area of a planer and its difference with respect to shaper Major components and their functions The table drive mechanism	Marker White Board
8	04/03/2024 TO 09/03/2024	Working of tool and tool support Clamping of work through sketch. Milling Machine Types of milling machine and operations performed by them and also same for CNC milling machine	White Board Marker Smart board
9	11/03/2024 TO 16/03/2024	Explain work holding attachment Construction & working of simple dividing head, universal dividing head Procedure of simple and compound indexing Illustration of different indexing methods	White Board Marker Smart board
10	18/03/2024 TO 23/03/2024	Slotter Major components and their function Construction and working of slotter machine Tools used in slotter	Marker White Board Smart board

11	27/03/2024 TO 30/03/2024	Grinding Significance of grinding operations Manufacturing of grinding wheels Criteria for selecting of grinding wheels	White Board Marker Smart board
12	02/04/2024 TO 06/04/2024	Specification of grinding wheels with Cylindrical Grinder Surface Grinder Centreless Grinder	Marker White Board Smart board
13.	08/04/2024 TO 13/04/2024	Classification of drilling machines. Bench drilling machine Pillar drilling machine Radial drilling machine	White Board Marker Smart board
14	15/04/2024 TO 20/04/2024	Boring Basic Principle of Boring Different between Boring and drilling Broaching	White Board Marker Smart board
15	22/ 04/2024 TO 26/04/2024	Types of Broaching(pull type, push type) Advantages of Broaching and applications Surface finish, lapping Description of lapping& explain their specific cutting.	White Board Marker Smart board

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